

Release notes for ENDF/B Development n-011\_Na\_022  
evaluation

**ENDF**  
**B-VII**.dev

April 26, 2017

• psyche Warnings:

1. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ISOTOPE MASS = 22. L = 0 / STRENGTH FUNCTION IS 1.37144E+00 / STRENGTH FUNCTION 1.37144E+00 / LIES OUTSIDE LIMITS 1.00000E-04 TO 9.00000E-04 (0): URR str. ftn.*

```
FILE 2
SECTION 151
ISOTOPE MASS = 22. L = 0
STRENGTH FUNCTION IS 1.37144E+00
STRENGTH FUNCTION 1.37144E+00
... [1 more lines]
```

2. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 1.34000E-04 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 1.34000E-04 / DENSITY 6.84072E+04 SHOULD BE 4.18453E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 1.34000E-04
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 1.34000E-04
DENSITY 6.84072E+04 SHOULD BE 4.18453E+04
```

3. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 1.34000E-04 / DENSITY 6.84072E+04 SHOULD BE 4.18453E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 1.34000E-04
DENSITY 6.84072E+04 SHOULD BE 4.18453E+04
```

4. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 1.34000E-04 / DENSITY 6.84072E+04 SHOULD BE 4.18453E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 1.34000E-04
DENSITY 6.84072E+04 SHOULD BE 4.18453E+04
```

5. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 1.34000E-04 / DENSITY 6.84072E+04 SHOULD BE 4.18453E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 1.34000E-04
DENSITY 6.84072E+04 SHOULD BE 4.18453E+04
```

6. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 1.34000E-04 / DENSITY 6.84072E+04 SHOULD BE 4.18453E+04 (0): URR dens. (a)*

FILE 2

SECTION 151

ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 1.34000E-04  
DENSITY 6.84072E+04 SHOULD BE 4.18453E+04

7. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 1.34000E-04 / DENSITY 6.84072E+04 SHOULD BE 4.18453E+04 (0): URR dens. (a)*

FILE 2

SECTION 151

ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 1.34000E-04  
DENSITY 6.84072E+04 SHOULD BE 4.18453E+04

8. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 1.34000E-04 / DENSITY 6.84072E+04 SHOULD BE 4.18453E+04 (0): URR dens. (a)*

FILE 2

SECTION 151

ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 1.34000E-04  
DENSITY 6.84072E+04 SHOULD BE 4.18453E+04

9. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 1.34000E-04 / DENSITY 6.84072E+04 SHOULD BE 4.18453E+04 (0): URR dens. (a)*

FILE 2

SECTION 151

ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 1.34000E-04  
DENSITY 6.84072E+04 SHOULD BE 4.18453E+04

10. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 1.34000E-04 / DENSITY 6.84072E+04 SHOULD BE 4.18453E+04 (0): URR dens. (a)*

FILE 2

SECTION 151

ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 1.34000E-04  
DENSITY 6.84072E+04 SHOULD BE 4.18453E+04

11. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 1.34000E-04 / DENSITY 6.84072E+04 SHOULD BE 4.18453E+04 (0): URR dens. (a)*

FILE 2

SECTION 151

ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 1.34000E-04  
DENSITY 6.84072E+04 SHOULD BE 4.18453E+04

12. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 2.79000E-04 / STRENGTH FUNCTION 2.79000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. fn.*

FILE 2  
SECTION 151  
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 2.79000E-04  
STRENGTH FUNCTION 2.79000E-04  
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04  
... [9 more lines]

13. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 5.58000E-04 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 5.57937E+04 SHOULD BE 3.92751E+04 (0): URR dens. (a)*

FILE 2  
SECTION 151  
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 5.58000E-04  
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 5.57937E+04 SHOULD BE 3.92751E+04

14. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 5.58000E-04 / STRENGTH FUNCTION 5.58000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*

FILE 2  
SECTION 151  
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 5.58000E-04  
STRENGTH FUNCTION 5.58000E-04  
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04  
... [1 more lines]

15. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 5.57937E+04 SHOULD BE 3.92751E+04 (0): URR dens. (a)*

FILE 2  
SECTION 151  
ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 5.57937E+04 SHOULD BE 3.92751E+04

16. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / STRENGTH FUNCTION 5.58000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*

FILE 2  
SECTION 151  
ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
STRENGTH FUNCTION 5.58000E-04  
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04  
... [1 more lines]

17. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 5.57937E+04 SHOULD BE 3.92751E+04 (0): URR dens. (a)*

- FILE 2  
SECTION 151  
ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 5.57937E+04 SHOULD BE 3.92751E+04
18. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / STRENGTH FUNCTION 5.58000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*
- FILE 2  
SECTION 151  
ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
STRENGTH FUNCTION 5.58000E-04  
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04  
... [1 more lines]
19. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 5.57937E+04 SHOULD BE 3.92751E+04 (0): URR dens. (a)*
- FILE 2  
SECTION 151  
ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 5.57937E+04 SHOULD BE 3.92751E+04
20. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / STRENGTH FUNCTION 5.58000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*
- FILE 2  
SECTION 151  
ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
STRENGTH FUNCTION 5.58000E-04  
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04  
... [1 more lines]
21. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 5.57937E+04 SHOULD BE 3.92751E+04 (0): URR dens. (a)*
- FILE 2  
SECTION 151  
ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 5.57937E+04 SHOULD BE 3.92751E+04
22. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / STRENGTH FUNCTION 5.58000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*
- FILE 2  
SECTION 151  
ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
STRENGTH FUNCTION 5.58000E-04

LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04

... [1 more lines]

23. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 5.57937E+04 SHOULD BE 3.92751E+04 (0): URR dens. (a)*

FILE 2

SECTION 151

ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 5.57937E+04 SHOULD BE 3.92751E+04

24. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / STRENGTH FUNCTION 5.58000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*

FILE 2

SECTION 151

ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
STRENGTH FUNCTION 5.58000E-04

LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04

... [1 more lines]

25. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 5.57937E+04 SHOULD BE 3.92751E+04 (0): URR dens. (a)*

FILE 2

SECTION 151

ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 5.57937E+04 SHOULD BE 3.92751E+04

26. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / STRENGTH FUNCTION 5.58000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*

FILE 2

SECTION 151

ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
STRENGTH FUNCTION 5.58000E-04

LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04

... [1 more lines]

27. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 5.57937E+04 SHOULD BE 3.92751E+04 (0): URR dens. (a)*

FILE 2

SECTION 151

ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 5.57937E+04 SHOULD BE 3.92751E+04

28. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 8.00000E+04. STRENGTH FUNCTION*

*IS 5.58000E-04 / STRENGTH FUNCTION 5.58000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*

```
FILE 2
SECTION 151
ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 5.58000E-04
STRENGTH FUNCTION 5.58000E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04

... [1 more lines]
```

29. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 5.57937E+04 SHOULD BE 3.92751E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 5.58000E-04
DENSITY 5.57937E+04 SHOULD BE 3.92751E+04
```

30. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / STRENGTH FUNCTION 5.58000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*

```
FILE 2
SECTION 151
ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 5.58000E-04
STRENGTH FUNCTION 5.58000E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04

... [1 more lines]
```

31. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 5.57937E+04 SHOULD BE 3.92751E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 5.58000E-04
DENSITY 5.57937E+04 SHOULD BE 3.92751E+04
```

32. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 5.58000E-04 / STRENGTH FUNCTION 5.58000E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*

```
FILE 2
SECTION 151
ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 5.58000E-04
STRENGTH FUNCTION 5.58000E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04

... [1 more lines]
```

33. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 5.58000E-04 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 6.84072E+04 SHOULD BE 2.94563E+04 (0): URR dens. (a)*

- FILE 2  
SECTION 151  
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 5.58000E-04  
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 6.84072E+04 SHOULD BE 2.94563E+04
34. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 6.84072E+04 SHOULD BE 2.94563E+04 (0): URR dens. (a)*
- FILE 2  
SECTION 151  
ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 6.84072E+04 SHOULD BE 2.94563E+04
35. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 6.84072E+04 SHOULD BE 2.94563E+04 (0): URR dens. (a)*
- FILE 2  
SECTION 151  
ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 6.84072E+04 SHOULD BE 2.94563E+04
36. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 6.84072E+04 SHOULD BE 2.94563E+04 (0): URR dens. (a)*
- FILE 2  
SECTION 151  
ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 6.84072E+04 SHOULD BE 2.94563E+04
37. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 6.84072E+04 SHOULD BE 2.94563E+04 (0): URR dens. (a)*
- FILE 2  
SECTION 151  
ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 6.84072E+04 SHOULD BE 2.94563E+04
38. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 6.84072E+04 SHOULD BE 2.94563E+04 (0): URR dens. (a)*
- FILE 2  
SECTION 151  
ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 6.84072E+04 SHOULD BE 2.94563E+04
39. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 6.84072E+04 SHOULD BE 2.94563E+04 (0): URR dens. (a)*



- FILE 2  
SECTION 151  
ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 6.84072E+04 SHOULD BE 2.94563E+04
40. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 6.84072E+04 SHOULD BE 2.94563E+04 (0): URR dens. (a)*
- FILE 2  
SECTION 151  
ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 6.84072E+04 SHOULD BE 2.94563E+04
41. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 6.84072E+04 SHOULD BE 2.94563E+04 (0): URR dens. (a)*
- FILE 2  
SECTION 151  
ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 6.84072E+04 SHOULD BE 2.94563E+04
42. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 5.58000E-04 / DENSITY 6.84072E+04 SHOULD BE 2.94563E+04 (0): URR dens. (a)*
- FILE 2  
SECTION 151  
ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 5.58000E-04  
DENSITY 6.84072E+04 SHOULD BE 2.94563E+04
43. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 2.78999E-04 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 2.78999E-04 / DENSITY 1.02952E+05 SHOULD BE 2.35650E+04 (0): URR dens. (a)*
- FILE 2  
SECTION 151  
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 2.78999E-04  
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 2.78999E-04  
DENSITY 1.02952E+05 SHOULD BE 2.35650E+04
44. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 2.78999E-04 / STRENGTH FUNCTION 2.78999E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*
- FILE 2  
SECTION 151  
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 2.78999E-04  
STRENGTH FUNCTION 2.78999E-04  
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04
45. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / DENSITY 1.02952E+05 SHOULD BE 2.35650E+04 (0): URR dens. (a)*

FILE 2  
SECTION 151  
ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 2.78999E-04  
DENSITY 1.02952E+05 SHOULD BE 2.35650E+04

46. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / STRENGTH FUNCTION 2.78999E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*

FILE 2  
SECTION 151  
ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 2.78999E-04  
STRENGTH FUNCTION 2.78999E-04  
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04

47. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / DENSITY 1.02952E+05 SHOULD BE 2.35650E+04 (0): URR dens. (a)*

FILE 2  
SECTION 151  
ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 2.78999E-04  
DENSITY 1.02952E+05 SHOULD BE 2.35650E+04

48. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / STRENGTH FUNCTION 2.78999E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*

FILE 2  
SECTION 151  
ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 2.78999E-04  
STRENGTH FUNCTION 2.78999E-04  
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04

49. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / DENSITY 1.02952E+05 SHOULD BE 2.35650E+04 (0): URR dens. (a)*

FILE 2  
SECTION 151  
ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 2.78999E-04  
DENSITY 1.02952E+05 SHOULD BE 2.35650E+04

50. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / STRENGTH FUNCTION 2.78999E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*

FILE 2  
SECTION 151  
ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 2.78999E-04  
STRENGTH FUNCTION 2.78999E-04  
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04

51. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / DENSITY 1.02952E+05 SHOULD BE 2.35650E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 2.78999E-04
DENSITY 1.02952E+05 SHOULD BE 2.35650E+04
```

52. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / STRENGTH FUNCTION 2.78999E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*

```
FILE 2
SECTION 151
ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 2.78999E-04
STRENGTH FUNCTION 2.78999E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04
```

53. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / DENSITY 1.02952E+05 SHOULD BE 2.35650E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 2.78999E-04
DENSITY 1.02952E+05 SHOULD BE 2.35650E+04
```

54. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / STRENGTH FUNCTION 2.78999E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*

```
FILE 2
SECTION 151
ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 2.78999E-04
STRENGTH FUNCTION 2.78999E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04
```

55. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / DENSITY 1.02952E+05 SHOULD BE 2.35650E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 2.78999E-04
DENSITY 1.02952E+05 SHOULD BE 2.35650E+04
```

56. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / STRENGTH FUNCTION 2.78999E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*

- FILE 2  
SECTION 151  
ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 2.78999E-04  
STRENGTH FUNCTION 2.78999E-04  
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04
57. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / DENSITY 1.02952E+05 SHOULD BE 2.35650E+04 (0): URR dens. (a)*
- FILE 2  
SECTION 151  
ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 2.78999E-04  
DENSITY 1.02952E+05 SHOULD BE 2.35650E+04
58. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / STRENGTH FUNCTION 2.78999E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*
- FILE 2  
SECTION 151  
ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 2.78999E-04  
STRENGTH FUNCTION 2.78999E-04  
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04
59. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / DENSITY 1.02952E+05 SHOULD BE 2.35650E+04 (0): URR dens. (a)*
- FILE 2  
SECTION 151  
ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 2.78999E-04  
DENSITY 1.02952E+05 SHOULD BE 2.35650E+04
60. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 2.78999E-04 / STRENGTH FUNCTION 2.78999E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*
- FILE 2  
SECTION 151  
ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 2.78999E-04  
STRENGTH FUNCTION 2.78999E-04  
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04
61. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 2.78999E-04 / DENSITY 1.02952E+05 SHOULD BE 2.35650E+04 (0): URR dens. (a)*
- FILE 2  
SECTION 151  
ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 2.78999E-04  
DENSITY 1.02952E+05 SHOULD BE 2.35650E+04

62. Strength function in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 2.78999E-04 / STRENGTH FUNCTION 2.78999E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04 (0): URR str. ftn.*
- ```

FILE 2
SECTION 151
ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 2.78999E-04
STRENGTH FUNCTION 2.78999E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 2.00000E-04

```
63. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.60000E-04 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.60000E-04 / DENSITY 5.89126E+04 SHOULD BE 4.77230E+04 (0): URR dens. (a)*
- ```

FILE 2
SECTION 151
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.60000E-04
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.60000E-04
DENSITY 5.89126E+04 SHOULD BE 4.77230E+04

```
64. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 6.60000E-04 / DENSITY 5.89126E+04 SHOULD BE 4.77230E+04 (0): URR dens. (a)*
- ```

FILE 2
SECTION 151
ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 6.60000E-04
DENSITY 5.89126E+04 SHOULD BE 4.77230E+04

```
65. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 6.60000E-04 / DENSITY 5.89126E+04 SHOULD BE 4.77230E+04 (0): URR dens. (a)*
- ```

FILE 2
SECTION 151
ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 6.60000E-04
DENSITY 5.89126E+04 SHOULD BE 4.77230E+04

```
66. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 6.60000E-04 / DENSITY 5.89126E+04 SHOULD BE 4.77230E+04 (0): URR dens. (a)*
- ```

FILE 2
SECTION 151
ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 6.60000E-04
DENSITY 5.89126E+04 SHOULD BE 4.77230E+04

```
67. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 6.60000E-04 / DENSITY 5.89126E+04 SHOULD BE 4.77230E+04 (0): URR dens. (a)*
- ```

FILE 2
SECTION 151
ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 6.60000E-04
DENSITY 5.89126E+04 SHOULD BE 4.77230E+04

```

68. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 6.60000E-04 / DENSITY 5.89126E+04 SHOULD BE 4.77230E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 6.60000E-04
DENSITY 5.89126E+04 SHOULD BE 4.77230E+04
```

69. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 6.60000E-04 / DENSITY 5.89126E+04 SHOULD BE 4.77230E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 6.60000E-04
DENSITY 5.89126E+04 SHOULD BE 4.77230E+04
```

70. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 6.60000E-04 / DENSITY 5.89126E+04 SHOULD BE 4.77230E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 6.60000E-04
DENSITY 5.89126E+04 SHOULD BE 4.77230E+04
```

71. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 6.60000E-04 / DENSITY 5.89126E+04 SHOULD BE 4.77230E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 6.60000E-04
DENSITY 5.89126E+04 SHOULD BE 4.77230E+04
```

72. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 6.60000E-04 / DENSITY 5.89126E+04 SHOULD BE 4.77230E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 6.60000E-04
DENSITY 5.89126E+04 SHOULD BE 4.77230E+04
```

73. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.59999E-04 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 5.57937E+04 SHOULD BE 3.18153E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.59999E-04
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 5.57937E+04 SHOULD BE 3.18153E+04
```

74. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 5.57937E+04 SHOULD BE 3.18153E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 5.57937E+04 SHOULD BE 3.18153E+04
```

75. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 5.57937E+04 SHOULD BE 3.18153E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 5.57937E+04 SHOULD BE 3.18153E+04
```

76. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 5.57937E+04 SHOULD BE 3.18153E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 5.57937E+04 SHOULD BE 3.18153E+04
```

77. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 5.57937E+04 SHOULD BE 3.18153E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 5.57937E+04 SHOULD BE 3.18153E+04
```

78. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 5.57937E+04 SHOULD BE 3.18153E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 5.57937E+04 SHOULD BE 3.18153E+04
```

79. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 5.57937E+04 SHOULD BE 3.18153E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 5.57937E+04 SHOULD BE 3.18153E+04
```

80. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 5.57937E+04 SHOULD BE 3.18153E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 5.57937E+04 SHOULD BE 3.18153E+04
```

81. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 5.57937E+04 SHOULD BE 3.18153E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 5.57937E+04 SHOULD BE 3.18153E+04
```

82. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 5.57937E+04 SHOULD BE 3.18153E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 5.57937E+04 SHOULD BE 3.18153E+04
```

83. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.59999E-04 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 6.84072E+04 SHOULD BE 2.38615E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.59999E-04
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 6.84072E+04 SHOULD BE 2.38615E+04
```

84. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 6.84072E+04 SHOULD BE 2.38615E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 6.84072E+04 SHOULD BE 2.38615E+04
```

85. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 6.84072E+04 SHOULD BE 2.38615E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 6.84072E+04 SHOULD BE 2.38615E+04
```



86. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 6.84072E+04 SHOULD BE 2.38615E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 6.84072E+04 SHOULD BE 2.38615E+04
```

87. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 6.84072E+04 SHOULD BE 2.38615E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 6.84072E+04 SHOULD BE 2.38615E+04
```

88. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 6.84072E+04 SHOULD BE 2.38615E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 6.84072E+04 SHOULD BE 2.38615E+04
```

89. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 6.84072E+04 SHOULD BE 2.38615E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 6.84072E+04 SHOULD BE 2.38615E+04
```

90. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 6.84072E+04 SHOULD BE 2.38615E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 6.84072E+04 SHOULD BE 2.38615E+04
```

91. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 6.84072E+04 SHOULD BE 2.38615E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 6.84072E+04 SHOULD BE 2.38615E+04
```

92. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 6.84072E+04 SHOULD BE 2.38615E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 6.84072E+04 SHOULD BE 2.38615E+04
```

93. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.59999E-04 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 1.02952E+05 SHOULD BE 1.90892E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.59999E-04
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 1.02952E+05 SHOULD BE 1.90892E+04
```

94. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 1.02952E+05 SHOULD BE 1.90892E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 1.02952E+05 SHOULD BE 1.90892E+04
```

95. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 1.02952E+05 SHOULD BE 1.90892E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 1.02952E+05 SHOULD BE 1.90892E+04
```

96. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 1.02952E+05 SHOULD BE 1.90892E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 1.02952E+05 SHOULD BE 1.90892E+04
```

97. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 1.02952E+05 SHOULD BE 1.90892E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 1.02952E+05 SHOULD BE 1.90892E+04
```

98. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 1.02952E+05 SHOULD BE 1.90892E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 1.02952E+05 SHOULD BE 1.90892E+04
```

99. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 1.02952E+05 SHOULD BE 1.90892E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 1.02952E+05 SHOULD BE 1.90892E+04
```

100. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 1.02952E+05 SHOULD BE 1.90892E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 1.02952E+05 SHOULD BE 1.90892E+04
```

101. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 1.02952E+05 SHOULD BE 1.90892E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 1.02952E+05 SHOULD BE 1.90892E+04
```

102. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 6.59999E-04 / DENSITY 1.02952E+05 SHOULD BE 1.90892E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 6.59999E-04
DENSITY 1.02952E+05 SHOULD BE 1.90892E+04
```

103. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 3.30000E-04 / ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 3.30000E-04 / DENSITY 1.85730E+05 SHOULD BE 1.59077E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 3.30000E-04
ENERGY = 1.50000E+04. STRENGTH FUNCTION IS 3.30000E-04
DENSITY 1.85730E+05 SHOULD BE 1.59077E+04
```

104. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 3.30000E-04 / DENSITY 1.85730E+05 SHOULD BE 1.59077E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 2.00000E+04. STRENGTH FUNCTION IS 3.30000E-04
DENSITY 1.85730E+05 SHOULD BE 1.59077E+04
```

105. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 3.30000E-04 / DENSITY 1.85730E+05 SHOULD BE 1.59077E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 3.00000E+04. STRENGTH FUNCTION IS 3.30000E-04
DENSITY 1.85730E+05 SHOULD BE 1.59077E+04
```

106. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 3.30000E-04 / DENSITY 1.85730E+05 SHOULD BE 1.59077E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 4.00000E+04. STRENGTH FUNCTION IS 3.30000E-04
DENSITY 1.85730E+05 SHOULD BE 1.59077E+04
```

107. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 3.30000E-04 / DENSITY 1.85730E+05 SHOULD BE 1.59077E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 5.00000E+04. STRENGTH FUNCTION IS 3.30000E-04
DENSITY 1.85730E+05 SHOULD BE 1.59077E+04
```

108. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 3.30000E-04 / DENSITY 1.85730E+05 SHOULD BE 1.59077E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 6.00000E+04. STRENGTH FUNCTION IS 3.30000E-04
DENSITY 1.85730E+05 SHOULD BE 1.59077E+04
```

109. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 3.30000E-04 / DENSITY 1.85730E+05 SHOULD BE 1.59077E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 7.00000E+04. STRENGTH FUNCTION IS 3.30000E-04
DENSITY 1.85730E+05 SHOULD BE 1.59077E+04
```

110. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 3.30000E-04 / DENSITY 1.85730E+05 SHOULD BE 1.59077E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 8.00000E+04. STRENGTH FUNCTION IS 3.30000E-04
DENSITY 1.85730E+05 SHOULD BE 1.59077E+04
```

111. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 3.30000E-04 / DENSITY 1.85730E+05 SHOULD BE 1.59077E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 9.00000E+04. STRENGTH FUNCTION IS 3.30000E-04
DENSITY 1.85730E+05 SHOULD BE 1.59077E+04
```

112. Level density in URR not in agreement with PSYCHE's expectations  
*FILE 2 / SECTION 151 / ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 3.30000E-04 / DENSITY 1.85730E+05 SHOULD BE 1.59077E+04 (0): URR dens. (a)*

```
FILE 2
SECTION 151
ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 3.30000E-04
DENSITY 1.85730E+05 SHOULD BE 1.59077E+04
```

113. Non-threshold reaction with Q value differing from PSYCHE's expectations  
*FILE 3 / SECTION 102 / THE CALCULATED Q 1.05825E+07 DISSAGREES WITH THE GIVEN Q 1.24200E+07 (0): Iffy Q*

```
FILE 3
SECTION 102
THE CALCULATED Q 1.05825E+07 DISSAGREES WITH THE GIVEN Q 1.24200E+07
```

114. Non-threshold reaction with Q value differing from PSYCHE's expectations  
*FILE 3 / SECTION 103 / THE CALCULATED Q 1.86011E+06 DISSAGREES WITH THE GIVEN Q 3.62500E+06 (0): Iffy Q*

```
FILE 3
SECTION 103
THE CALCULATED Q 1.86011E+06 DISSAGREES WITH THE GIVEN Q 3.62500E+06
```

115. Non-threshold reaction with Q value differing from PSYCHE's expectations  
*FILE 3 / SECTION 107 / THE CALCULATED Q 2.93658E+05 DISSAGREES WITH THE GIVEN Q 1.95000E+06 (0): Iffy Q*

```
FILE 3
SECTION 107
THE CALCULATED Q 2.93658E+05 DISSAGREES WITH THE GIVEN Q 1.95000E+06
```

- linear Errors:

1. Negative cross section found  
*0: Neg. Sig(E)*

```

Linearize ENDF/B Cross Sections (LINEAR 2015-1)
-----
Retrieval Criteria----- MAT
Monitor Mode----- Off
Minimum Cross Section----- 1.0000E-10 (Default Option)
... [66 more lines]

```

- recent Warnings:

1. Statistical weight of certain L values were incorrect  
*0: RRR goof (a)*

```

Calculate Cross Sections from Resonance Parameters (RECENT 2015-1)
=====
Retrieval Criteria----- MAT
File 2 Minimum Cross Section- 1.0000E-10 (Standard Option)
Reactions with No Background- Output (Resonance Contribution)
... [445 more lines]

```

- fudge-4.0 Warnings:

1. Missing a channel with a particular angular momenta combination  
*resonances / resolved (Error # 1): missingResonanceChannel*

```

WARNING: Missing a channel with angular momenta combination L = 0, J = 1.5 and S = 1.5 for "capture"
WARNING: Missing a channel with angular momenta combination L = 0, J = 2.5 and S = 2.5 for "capture"

```

2. Potential scattering hasn't converted, you need more L's!  
*resonances / resolved (Error # 2): potentialScatteringNotConverged*

```

WARNING: Potential scattering hasn't converged by L=0 at E=15000.0 eV, xs[0]/xs[0]=100.0% > 0.1%

```

3. Cross section does not match sum of linked reaction cross sections  
*crossSectionSum label 0: total (Error # 0): CS Sum.*

```

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 11.96%

```

4. Cross section does not match sum of linked reaction cross sections  
*crossSectionSum label 1: (z,n) (Error # 0): CS Sum.*

```

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 30.20%

```

- fudge-4.0 Errors:

1. The spin statistical weights are off, indicating missing channels  
*resonances / resolved / MultiLevel BreitWigner (Error # 0): badSpinStatisticalWeights*

```

WARNING: The spin statistical weights for L=0 sums to 0.571428571429, but should sum to 1.0. You have too few channels

```

2. Calculated and tabulated Q values disagree.  
*reaction label 13: n[multiplicity:'2'] + Na21 (Error # 0): Q mismatch*

```

WARNING: Calculated and tabulated Q-values disagree: -11063635.70806885 eV vs -1.0584e7 eV!

```

3. Calculated and tabulated Q values disagree.  
*reaction label 14: n + H1 + Ne21 (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: -6733673.49848175 eV vs -6.6931e6 eV!

4. Calculated and tabulated Q values disagree.  
*reaction label 16: n + He4 + F18 (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: -8475096.104881287 eV vs -1.0518e7 eV!

5. Calculated and tabulated Q values disagree.  
*reaction label 19: H2 + Ne21\_s (Error # 0): Q mismatch*

WARNING: Calculated and tabulated Q-values disagree: -4509107.397544861 eV vs -3.8246e6 eV!

• njoy2012 Warnings:

1. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!  
*group...compute self-shielded group-averaged cross-sections (0): GROUPT/conver (0)*

---message from conver---cannot do complete particle production for mt= 16  
only mf4/mf5 provided

2. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!  
*group...compute self-shielded group-averaged cross-sections (1): GROUPT/conver (0)*

---message from conver---cannot do complete particle production for mt= 22  
only mf4/mf5 provided

3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!  
*group...compute self-shielded group-averaged cross-sections (2): GROUPT/conver (0)*

---message from conver---cannot do complete particle production for mt= 28  
only mf4/mf5 provided

4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!  
*group...compute self-shielded group-averaged cross-sections (3): GROUPT/conver (0)*

---message from conver---cannot do complete particle production for mt= 91  
only mf4/mf5 provided

• accelst Warnings:

1. generic warning message  
*0: Warning*

ACELST WARNING - More than one range for MF/MT                      6                      91  
STOP ACELST Completed